WHAT IS CLAIMED IS:

1. A communication node, comprising:
    a first interface unit connected to a first network;
5   a second interface unit connected to a second network;
    a recognition unit for recognizing one communication node on the first network as one of constituent elements in said communication node; and
    a configuration information disclosure unit for
10 disclosing an own configuration information regarding the constituent elements as recognized by the recognition unit, to another communication node on the second network through the second interface unit.

15 2. The communication node of claim 1, wherein the configuration information disclosure unit also discloses existing constituent elements in said one communication node on the first network as sub constituent elements in the constituent elements of said communication node.

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    3. The communication node of claim 1, further comprising:
    a detection unit for detecting a first message identifier on the second network which is described in a packet received through the second interface unit;
25 a message identifier attaching unit for attaching a second message identifier on the first network to the packet at a time of transferring the packet to the first network;
    a message identifier correspondence memory unit for
30 storing a correspondence between the first message identifier and the second message identifier; and
    a routing unit for identifying a message identifier on the second network corresponding to one message identifier on the first network which is described in a packet sent
35 from the first network, by referring to the correspondence

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stored by the message identifier correspondence memory unit according to said one message identifier.

4. The communication node of claim 1, further comprising:

a resource acquisition unit having at least one of a function for reserving a network resource on the second network by using a first resource information regarding a network resource reserved on the first network, and a function for reserving a network resource on the first network by using a second resource information regarding a network resource reserved on the second network; and

a resource information correspondence memory unit for storing a correspondence between the first resource information and the second resource information.

5. The communication node of claim 1, further comprising at least one of:

a node constituent elements information addition unit for adding a new configuration information regarding constituent elements in a new communication node to the own configuration information regarding constituent elements in said communication node, when the new communication node is added on the first network; and

a node constituent information deletion unit for deleting an old configuration information regarding constituent elements in an old communication node from the own configuration information regarding constituent elements in said communication node, when the old communication node is deleted from the first network.

6. The communication node of claim 1, further comprising:

a configuration information notification unit for notifying to said one communication node on the first network at least a part of the own configuration information regarding constituent elements in said

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communication node including constituent elements
corresponding to said one communication node or constituent
elements in said one communication node; and

a configuration information reception unit for
5 receiving from said one communication node at least a part
of another configuration information regarding constituent
elements in one other communication node on the second
network including constituent elements corresponding to
said one communication node or constituent elements in said
10 one communication node, that was notified from said one
other communication node to which said one communication
node was connected up until then.

7.   The communication node of claim 1, further comprising:
15   a communication resource notification unit for
notifying to said one communication node on the first
network a resource information regarding communication
resources on the second network that are exclusively used
for communications between said one communication node and
20 one other communication node on the second network to which
said one communication node was connected up until then;
and

a configuration information reception unit for
receiving from said one communication node the resource
25 information, that was notified from said one other
communication node.

8.   A communication node, comprising:
a first interface unit connected to a first network;
a second interface unit connected to a second network;
30 and
a configuration information disclosure unit having at
least one of a function for disclosing a first
configuration information regarding constituent elements in
35 one communication node on the first network as an own

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configuration information regarding constituent elements in said communication node, to another communication node on the second network through the second interface unit, and a function for disclosing a second configuration information regarding constituent elements in said another communication node on the second network as the own configuration information regarding constituent elements in said communication node, to said one communication node on the first network through the first interface unit.

9. The communication node of claim 8, wherein the configuration information disclosure unit discloses the first configuration information by defining said one communication node on the first network as one type of constituent elements of said communication node.

10. The communication node of claim 8, further comprising:
a configuration information correspondence memory unit for storing a correspondence between the first configuration information disclosed to the second network as constituent elements corresponding to said one communication node or constituent elements existing in said one communication node, and actual configuration information regarding said one communication node or constituent elements existing in said one communication node; and
a routing unit for identifying a destination communication node on the first network or a destination constituent element of the destination communication node on the first network for a packet sent from the second network, by referring to the configuration information correspondence memory unit according to identifiers of constituent elements in said communication node which are disclosed by the configuration information disclosure unit and described in the packet.

11. The communication node of claim 8, further comprising:

a detection unit for detecting a first message identifier on the second network which is described in a packet received through the second interface unit;

a message identifier attaching unit for attaching a second message identifier on the first network to the packet at a time of transferring the packet to the first network;

a message identifier correspondence memory unit for storing a correspondence between the first message identifier and the second message identifier; and

a routing unit for identifying a message identifier on the second network corresponding to one message identifier on the first network which is described in a packet sent from the first network, by referring to the correspondence stored by the message identifier correspondence memory unit according to said one message identifier.

12. The communication node of claim 8, further comprising:

a resource acquisition unit having at least one of a function for reserving a network resource on the second network by using a first resource information regarding a network resource reserved on the first network, and a function for reserving a network resource on the first network by using a second resource information regarding a network resource reserved on the second network; and

a resource information correspondence memory unit for storing a correspondence between the first resource information and the second resource information.

13. The communication node of claim 8, further comprising at least one of:

a node constituent elements information addition unit for adding a new configuration information regarding

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constituent elements in a new communication node to the own configuration information regarding constituent elements in said communication node, when the new communication node is added on the first network; and

5   a node constituent information deletion unit for deleting an old configuration information regarding constituent elements in an old communication node from the own configuration information regarding constituent elements in said communication node, when the old

10 communication node is deleted from the first network.

14.   The communication node of claim 8, further comprising:
      a configuration information notification unit for notifying to said one communication node on the first

15 network at least a part of the own configuration information regarding constituent elements in said communication node including constituent elements corresponding to said one communication node or constituent elements in said one communication node; and

20   a configuration information reception unit for receiving from said one communication node at least a part of another configuration information regarding constituent elements in one other communication node on the second network including constituent elements corresponding to

25 said one communication node or constituent elements in said one communication node, that was notified from said one other communication node to which said one communication node was connected up until then.

30 15.   The communication node of claim 8, further comprising:
      a communication resource notification unit for notifying to said one communication node on the first network a resource information regarding communication resources on the second network that are exclusively used

35 for communications between said one communication node and

one other communication node on the second network to which said one communication node was connected up until then; and

a configuration information reception unit for receiving from said one communication node the resource information, that was notified from said one other communication node.

16. A communication node, comprising:

a first interface unit connected to a first network;

a second interface unit connected to a second network;

a packet input/output unit for carrying out packet input/output processing according to a protocol of the second network; and

an application interface information transfer unit for transferring data to be exchanged at an interface between the packet input/output unit and an application executed on another communication node on the second network, through the first interface unit, so as to handle one communication node connected through the first interface unit as if said one communication node is connected to the second network.

17. The communication node of claim 16, further comprising:

a detection unit for detecting a first message identifier on the second network which is described in a packet received through the second interface unit;

a message identifier attaching unit for attaching a second message identifier on the first network to the packet at a time of transferring the packet to the first network;

a message identifier correspondence memory unit for storing a correspondence between the first message identifier and the second message identifier; and

a routing unit for identifying a message identifier on

the second network corresponding to one message identifier on the first network which is described in a packet sent from the first network, by referring to the correspondence stored by the message identifier correspondence memory unit according to said one message identifier.

18. The communication node of claim 16, further comprising:
    a resource acquisition unit having at least one of a function for reserving a network resource on the second network by using a first resource information regarding a network resource reserved on the first network, and a function for reserving a network resource on the first network by using a second resource information regarding a network resource reserved on the second network; and
    a resource information correspondence memory unit for storing a correspondence between the first resource information and the second resource information.

19. A communication terminal, comprising:
    an interface unit connected to a first network;
    a connection unit for making a connection to a first communication node on the first network through the interface unit;
    a communication unit for communicating with a second communication node on a second network different from the first network, through the first communication node;
    a communication terminal function disclosure unit for disclosing functions in said communication terminal as Sub Units in an AV/C (Audio/Visual Control) protocol executed on an IEEE 1394 bus; and
    a Sub Unit information reception unit for receiving at least a part of information regarding Sub Units existing in the second communication node.

20.   The communication terminal of claim 19, further comprising:

a configuration information reception unit for receiving at least a part of a configuration information regarding constituent elements existing in the first communication node including a constituent element corresponding to said communication terminal, which is notified from the first communication node in order for the first communication node to handle said communication terminal as one of constituent elements existing in the first communication node;

a configuration information memory unit for storing at least a part of the configuration information received by the configuration information reception unit; and

a configuration information notification unit for notifying at least a part of the configuration information stored in the configuration information memory unit, to a third communication node on the second network to which said communication terminal is newly connected.

21.   The communication terminal of claim 19, further comprising:

a communication resource information reception unit for receiving a communication resource information regarding communication resources on the second network which are exclusively used for communications between said communication terminal and the second communication node, which is notified from the first communication node;

a communication resource information memory unit for storing at least a part of the communication resource information received by the communication resource information reception unit; and

a communication resource information transfer unit for notifying the communication resource information stored in the communication resource information memory unit, to a

third communication node on the second network to which said communication terminal is newly connected.

22. A communication terminal, comprising:
an interface unit connected to a first network;
a connection unit for making a connection to a first communication node on the first network through the interface unit;
a communication unit for communicating with a second communication node on a second network different from the first network, through the first communication node; and
an application execution unit for executing an application on the second network which is to be executed in the second communication node.

23. The communication terminal of claim 22, further comprising:
a configuration information reception unit for receiving at least a part of a configuration information regarding constituent elements existing in the first communication node including a constituent element corresponding to said communication terminal, which is notified from the first communication node in order for the first communication node to handle said communication terminal as one of constituent elements existing in the first communication node;
a configuration information memory unit for storing at least a part of the configuration information received by the configuration information reception unit; and
a configuration information notification unit for notifying at least a part of the configuration information stored in the configuration information memory unit, to a third communication node on the second network to which said communication terminal is newly connected.

24. The communication terminal of claim 22, further comprising:

a communication resource information reception unit for receiving a communication resource information regarding communication resources on the second network which are exclusively used for communications between said communication terminal and the second communication node, which is notified from the first communication node;

a communication resource information memory unit for storing at least a part of the communication resource information received by the communication resource information reception unit; and

a communication resource information transfer unit for notifying the communication resource information stored in the communication resource information memory unit, to a third communication node on the second network to which said communication terminal is newly connected.

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